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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,242	12/02/2003	Michael Guidry	FY.50860US1A	3513
20995	7590	12/08/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			BOTTORFF, CHRISTOPHER	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			3618	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/726,242	Applicant(s) GUIDRY ET AL.	
	Examiner Christopher Bottorff	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 10-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9 is/are rejected.
- 7) ☒ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of Invention I, claims 1-9; Species A as depicted in Figure 7; and Species 1 as depicted in Figure 13, in the reply filed on November 25, 2005 is acknowledged. Because applicant did not distinctly and specifically point out errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 8 and 10-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Claims 1-7 and 9 are currently under consideration.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on April 5, 2004 considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. US 5,193,635 in view of Mizuta US 6,517,111.

Mizuno et al. disclose an electric motor-operated vehicle comprising a plurality of wheels 13, 14, a vehicle body 12, a seat 18 connected to the vehicle body 12, a loading platform that supports accessories such as rack 52, an electric motor configured to drive the vehicle, at least one battery 44 configured to supply power to the electric motor, a fuel cell 24 configured to charge the at least one battery, at least one fuel tank 31 configured to supply fuel to said fuel cell, and an electric motor control unit 45 configured to control the operation of said electric motor. See Figure 7 and column 4, lines 22-29. Also, note Figures 1 and 2 and column 4, lines 34-45. At least one of the plurality of wheels is a front wheel 13 and at least one of the plurality of is a wheels rear wheel 14. See Figure 7. The vehicle body 12 defines a vehicle width extending along a transverse axis between a left side and a right side of the vehicle, and defines a vehicle length extending along a longitudinal axis between a front end and a rear end of the vehicle body. See Figures 7 and 8. The loading platform is disposed rearward of the seat 18 above the rear wheel 14 and configured to receive at least one object. See Figure 7. The at least one fuel tank 31 has a front end and a rear end defining a longitudinal axis extending between the front end and the rear end. See Figures 1 and 2. Although the at least one fuel tank 31 is not disposed along the longitudinal centerline of the vehicle, the fuel tank 31 is disposed in a central region of the vehicle and is, therefore, disposed centrally along the vehicle width. See Figure 1. The fuel cell 24 is disposed between the front end of the at least one fuel tank 31 and the front end of

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the vehicle body, and the fuel cell 24 is further disposed beneath the seat 18. See Figure 2. Also, the electric motor controller 31 is disposed rearward of the fuel tank; at least partially. See Figure 2.

Mizuno et al. do not disclose main frame rails disposed along the longitudinal axis of the vehicle body or right and left side rails of a loading platform receiving frame that is connected to the main frame rails and to which the loading platform is connected. However, Mizuta teaches the desirability of disposing main frame rails 10 along the longitudinal axis of a vehicle body and providing right and left side rails of a loading platform receiving frame that is connected to the main frame rails 10 and to which a loading platform 5 is connected. See Figures 2 and 4. From the teachings of Mizuta, disposing main frame rails along the longitudinal axis of the vehicle body of Mizuno et al. and providing right and left side rails of a loading platform receiving frame that is connected to the main frame rails and to which the loading platform is connected would have been obvious to one of ordinary skill in the art at the time the invention was made. This would provide a support structure for the vehicle body and systems. Also, in the structure resulting from this combination, the at least one battery would be disposed between the at least one fuel tank and one of the left and right side rails of the loading platform receiving frame.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. US 5,193,635 in view of Mizuta US 6,517,111 as applied to claim 1 above, and further in view of Naumann et al. US 5,320,190.

Mizuno et al. do not disclose at least one air intake opening formed on the vehicle body between the at least one battery and the front end of the vehicle body, wherein the at least one air intake opening is configured to receive at least part of an amount of air caused to flow rearward by a propulsion of the vehicle to cool the at least one battery. However, Naumann et al. teach the desirability of providing at least one air intake opening formed on a vehicle body at guide 5 between a battery, accommodated in housing 9, and the front end of the vehicle body. See Figure 1. The at least one air intake opening is configured to receive at least part of an amount of air caused to flow rearward by a propulsion of the vehicle to cool the battery. See column 5, lines 14-21. From the teachings of Naumann et al., providing the vehicle of Mizuno et al. with at least one air intake opening formed on the vehicle body between the at least one battery and the front end of the vehicle body, wherein the at least one air intake opening is configured to receive at least part of an amount of air caused to flow rearward by a propulsion of the vehicle, would have been obvious to one of ordinary skill in the art at the time the invention was made. This would help to cool the at least one battery for optimal performance.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. US 5,193,635 in view of Mizuta US 6,517,111 as applied to claim 1 above, and further in view of Ap US 6,448,535.

Mizuno et al. do not disclose an air intake opening for the fuel cell, wherein the air intake opening is formed on the vehicle body frontward of the fuel cell and is

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configured to receive at least part of an amount of air caused to flow rearward by propulsion of the vehicle to cool the fuel cell. However, Ap teaches the desirability of providing an air intake opening for a fuel cell 12, wherein the air intake opening is formed on a vehicle body frontward of the fuel cell 12 and radiator 52 and is configured to receive at least part of an amount of air caused to flow rearward by propulsion of the vehicle to cool the fuel cell. See Figure 2 and column 4, lines 13-20. From the teachings of Ap, providing the vehicle of Mizuno et al. with an air intake opening for the fuel cell, wherein the air intake opening is formed on the vehicle body frontward of the fuel cell and is configured to receive at least part of an amount of air caused to flow rearward by propulsion of the vehicle, would have been obvious to one of ordinary skill in the art at the time the invention was made. This would help to cool the fuel cell for optimal performance.

Allowable Subject Matter

Claims 4-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4 requires the vehicle to have a fuel cell holder with an opening defined by a lateral end and configured to receive at least part of an amount of air caused to flow rearward by a propulsion of the vehicle. This feature, in combination with the further limitations of the claims, distinguishes the claimed invention from the prior art. Prior art

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fuel cell holders, as exemplified by the box containing fuel cell 12 of Ap, have openings that allow the entry or exit of cooling liquid, but not propulsion generated air.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Eggert, JR., Mauws, Reimer et al., Otsu, Ono et al., Kodama et al., Mita et al., and Chernoff et al. disclose vehicle arrangements. Karolek et al., Mizuta US 5,086,858 et al., and Kronner et al. disclose vehicle component cooling systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

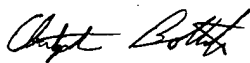
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Chris Bottorff", written in a cursive style.

Christopher Bottorff